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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,043	03/10/2004	Mark R. Smith	INP003-US 2737	
75	90 06/13/2005		EXAMINER	
Lawrence D. I			GELIN, JEAN	N ALLAND
1650 Tysons Bo			ART UNIT	PAPER NUMBER
McLean, VA 22102			2681	
			DATE MAIL ED: 06/13/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		10/796,043	SMITH ET AL.
	Office Action Summary	Examiner	Art Unit
		Jean A. Gelin	2681
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address
A SH THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period v preto reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status			
1)⊠ 2a)□ 3)□	Responsive to communication(s) filed on <u>26 Ja</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.	
Disposit	ion of Claims		
5)⊠ 6)⊠ 7)□	Claim(s) <u>1-25</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray Claim(s) <u>23-25</u> is/are allowed. Claim(s) <u>1-22</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	vn from consideration.	
Applicat	ion Papers		
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) according a confidence of the Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	epted or b) objected to by the liderawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).
Priority (	ınder 35 U.S.C. § 119		
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachmen	t(s)		
2) 🔲 Notic 3) 🔯 Infori	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>1/26/05 &amp; 3/24/05</u> .	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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### **DETAILED ACTION**

This is in response to the Applicant's amendments and arguments January 26,
 2005 in which claims 1 and 23 have been amended, claims 24 and 25 have been
 added. Claims 1-25 are currently pending.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4, 8-15, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Allison et al. (US 2003/0003030).

Regarding claims 1, 12, Bennett teaches a method of exchanging a short message service (SMS) message between networks operating in accordance with different standards (section 0005), comprising: establishing an intermediary system (corresponding to router 24 and routing database 22 collectively) that operates between a first network operating in accordance with a first standard and a second network operating in accordance with a second standard (sections 0020-0021, 0062); receiving, at the intermediary, a routing information request for an SMS message from the first network (i.e., the function of the message broker, sections 0024, 0189); and sending the SMS message from the intermediary to the second network, wherein the intermediary is an entity distinct from the first and second networks (section 0062).

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Bennett does not specifically teach sending, from the intermediary in response to the routing information request, an acknowledgement message to the first network; receiving the SMS message at the intermediary; generating, in the intermediary, an acknowledgement of receipt of the SMS message, and sending the acknowledgement of receipt to the first network.

However, the preceding limitations are known in the art of communications. Allison teaches converting messages from one application protocol to another application. Allison teaches an SRI SM acknowledgement in response to an SRI SM message at the routing node; upon receiving the acknowledgement, the first network (GSM) forwards the message to routing node, the converter builds the ack message, and forwards it to the first network (paragraphs 8, 9, and 28-33). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Allison within the system of Bennett in order to improve method and systems for setting up calls and delivering short message service messages between subscribers of different application layer mobile communications protocols, and eliminate the need for the routing node to translate the GSM message into an IS-41 message

Regarding claims 2, 13, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein the first network operates in accordance with GSM standards (section 0026).

Regarding claims 3, 14, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein the second network operates in accordance

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with ANSI standards (i.e., facilitating communication between all combination of connection types and format, section 0062).

Regarding claims 4, 15, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein the intermediary system emulates a mobile switching center operating in accordance with GSM standards (i.e., server functioning as a broker takes decision or to route the message, sections 0061-0063).

Regarding claims 8, 19, Bennett in view of Allison teaches all the limitations above. Allison further teaches wherein the step of sending the acknowledgement of receipt to the first network is performed only after a response from the second network is received at the intermediary system (paragraphs 9-10).

Regarding claims 9, 20, Bennett in view of Allison teaches all the limitations above. Allison further teaches wherein the step of sending the acknowledgement of receipt to the first network is performed only after an acknowledgement of receipt of the SMS message is received from the second network at the intermediary system (section 8-10 and 24-28).

Regarding claims 10, 21, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein the intermediary operates (i.e., server 24 operates as broker, a translator, or a reformatter), from the perspective of the first network, as a Mobile Switching Center (MSC) (see fig. 1), in accordance with the same standards as the standards of the first network (section 0062).

Regarding claims 11, 22, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein the intermediary operates (i.e., server 24

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operates as broker, a translator, or a reformatter), from the perspective of the second network, as a Mobile Switching Center (MSC) (see fig. 1), in accordance with the same standards as the standards of the second network (section 0062).

4. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Allison et al. (US 2003/0003030) further in view of Tuomi (US 2004/0093418).

Regarding claims 5, 16, Bennett in view of Allison (030) further in view of Allison (078) teaches all the limitations above except wherein the routing information request is a MAP Send Routing Information for MT SMS message in accordance with GSM standards.

However, the preceding limitation is known in the art of communications. Tuomi teaches the server emulates SMS-GMSC by sending a routing information request to the database (HLR); the service needed to implement this in the GSM environment is the MAP Send Routing Information For Short Message (section 0041). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Tuomi within the system of Bennett and Allison in order to determine the MSC serving the mobile station.

5. Claims 6, 7, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Allison et al. (US 2003/0003030) further in view of Allison et al. (US 2003/0083078).

Regarding claims 6, 17, Bennett in view of Allison (030) teaches all the limitations above except performing a GTT look up to determine to which switch the SMS message should be sent.

However, the preceding limitation is known in the art of communications. Allison teaches GTT associated with message discriminator is a translation process used to determine the location, and the GTT is required to route the message to SMSC (sections 0076-0079). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Allison within the system of Bennett and Allison (030) in order to perform a look up in the database of message discriminator, and determine whether the SMS message is an unwanted message.

Regarding claims 7, 18, Bennett in view of Allison (030) further in view of Allison (078) teaches all the limitations above. Bennett further teaches wherein when the SMS message is directed to a mobile station (MS) operating in the second network, the SMS message is routed to the intermediary system (i.e., transmitting message from one station in one network to another station in another network via the broker server, section 0062).

## Allowable Subject Matter

- 6. Claims 23-25 are allowed.
- 7. The following is a statement of reasons for the indication of allowable subject matter: the prior arts teach exchanging a short message service (SMS) message

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between networks operating in accordance with different standards as recited in the rejection above.

On the other hand, the Applicant teaches, inter alia, wherein the GSM SMSC functionality comprises sending appropriately timed acknowledgement messages to a GSM-compliant network when the SMS message is being exchanged with an ANSI-compliant network. This limitation, in conjunction with all limitations of the independent claim, has not been disclosed, taught, or made obvious over the prior art of record

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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JGelin

June 7, 2005

PRIMARY EXAMINER